

# DR. EVA C. HERBST

## POSTDOCTORAL FELLOW IN SHOULDER BIOMECHANICS

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[Website](#) - [Github](#) - [GoogleScholar](#) - [Figshare](#) - [Publons](#) - [Orcid](#)

## EDUCATION

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OCT 2016 - APR 2020	PhD in Biomechanics and Palaeontology <i>Advisor: John Hutchinson, Structure &amp; Motion Lab, Royal Veterinary College, London</i>
AUG 2012 - MAY 2016	B.A. in Integrative Biology <i>U.C. Berkeley</i>
OCT 2013 - JUN 2014	Degree of Higher Education in Biomedical Sciences <i>Durham University, Year of Study Abroad, Certificate of Higher Education</i>

## EMPLOYMENT & RESEARCH EXPERIENCE

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MAR 2023 - PRESENT	Postdoctoral Fellow: Computational Shoulder Biomechanics <i>ETH &amp; Schulthess Clinic, Zurich</i>
DEC 2019 - NOV 2022	Postdoctoral Researcher: Skull Biomechanics of Triassic Reptiles <i>Palaeontological Institute &amp; Museum, University of Zurich</i>
OCT 2019 - DEC 2019	OATech+ Network Early Career Researcher Placement: Knee Osteoarthritis <i>Skeletal Biology Group, Royal Veterinary College London</i>
MAY 2013 - JUL 2016	Undergraduate Research Assistant: Anatomy and Biomechanics Projects <i>U.C. Berkeley &amp; University of Missouri</i>

## PEER-REVIEWED PUBLICATIONS

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| 12 papers, 8 of which are first author publications. Please see a full list of publications [here](#).

## HONORS & AWARDS

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2021	<b>D. Dwight Davis Award, Society of Integrative and Comparative Morphology</b> Best student oral presentation in the Division of Vertebrate Morphology
2020	<b>Swiss Commission of Palaeontology Prize</b> Best presentation in palaeontology given at the Swiss Geoscience Meeting
2016	<b>Franklin M. Henry Award, Integrative Biology, UC Berkeley</b> Outstanding achievement in human performance and health research
2016	<b>Distinction in General Scholarship, UC Berkeley</b> Awarded to graduates achieving high grade point average
2013, 2015	<b>Dean's Honors, UC Berkeley</b> Awarded to graduates achieving high grade point average

## GRANTS & FUNDING

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2024	<b>ETH Career Seed Award</b> Grant for hiring a research assistant for the project "Age-based Bone Density of the Glenoid: Method Development and Quantification of Patient Variation"	30,000 CHF
2024	<b>Gesellschaft für Arthroskopie und Gelenkchirurgie</b> Grant for establishing a clinical imaging database of shoulder instability patients	10,000 EUR
2024	<b>Hamlyn Symposium for Medical Robotics Accepted Workshop Proposal</b> Organisation of Workshop: Open-Source Software for Surgical Technologies, London, June 2024	2,500 GBP
2023	<b>Digital Switzerland Boost Programme</b> Grant for attending Advanced 3D Slicer Programming Course	420 CHF
2021	<b>ImagingBioPro Network Online Educational Material Grant</b> Development of educational materials and code: <a href="#">mesh manipulation</a> and <a href="#">trabecular segmentation</a>	1,000 GBP
2020	<b>University of Zurich GRC Grant</b> Organization of finite element analysis <a href="#">conference and workshop</a> with over 200 participants, development of <a href="#">website</a> and <a href="#">Github organisation</a> for sharing finite element modeling methods	10,000 CHF
2019	<b>OATech+ Network Biomechanics and Mechanobiology Pump Priming Fund</b> Research project 3D trabecular architecture as a biomarker to identify and monitor knee osteoarthritis	10,000 GBP
2019	<b>OATech+ Network Early Career Researcher Placement</b> Placement with Prof Andrew Pitsillides at RVC to work on osteoarthritis project (see above)	3,000 GBP
2018 2019	<b>Royal Veterinary College Foreign Travel Fund</b> 300 GBP each to present research at ICVM and SICB conferences	600 GBP
2016	<b>Research Experience for Undergraduates, National Science Foundation</b> Biomechanics research internship, University of Missouri	3,500 USD

## CONFERENCE PRESENTATIONS, INVITED TALKS & WORKSHOPS, TEACHING

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| Please see a full list of my presentations, invited talks, workshops, and teaching [here](#).

## SUPERVISION

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- **Jan Heres**, Master's Thesis: Reconstruction of a patient-specific model of the humerus bone. University of West Bohemia (acting as external supervisor). (2024)
- **Dennis Agbanyim**, Master's Thesis: Scapular Bone Density Calibration, ETH Zurich (2024)
- **Flavia Stettler**, Master's Semester Project: Humeral Translations, ETH Zurich (2024)
- **Dylan Bastiaans**, PhD Thesis: Digital Palaontology and Biomechanics, UZH (2019-2023)
- **Kehan Pan**, Master's Semester Project: Skull FEA, ETH Zurich (2022)

## OPEN-SOURCE WORK

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| I have developed several open-source programs, which are available on my [website](#).